

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P16281PCT	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/US2004/030390	International filing date (day/month/year) 15/09/2004	(Earliest) Priority Date (day/month/year) 17/09/2003
Applicant INTEL CORPORATION		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. Certain claims were found unsearchable (See Box II).

3. Unity of invention is lacking (see Box III).

4. With regard to the title,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

NO DOCKETING REQUIRED
N.A.

5. With regard to the abstract,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 2

as suggested by the applicant.

as selected by this Authority, because the applicant failed to suggest a figure.

as selected by this Authority, because this figure better characterizes the invention.

b. none of the figures is to be published with the abstract.

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L27/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>SAI KIT LAI ET AL: "Adaptive trellis coded MQAM and power optimization for OFDM transmission" VEHICULAR TECHNOLOGY CONFERENCE, 1999 IEEE 49TH HOUSTON, TX, USA 16-20 MAY 1999, PISCATAWAY, NJ, USA, IEEE, US, vol. 1, 16 May 1999 (1999-05-16), pages 290-294, XP010341993 ISBN: 0-7803-5565-2 abstract page 292 "II. ATM-OFDM SYSTEM" on page 291, left-hand column</p> <p>-----</p>	1-20
X	<p>US 2003/043732 A1 (WALTON JAY R ET AL) 6 March 2003 (2003-03-06) paragraphs '0003!, '0203!, '0209!</p> <p>-----</p> <p>-/-</p>	1-20

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

7 February 2005

18/02/2005

Name and mailing address of the ISA

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Horbach, C

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 5 400 322 A (HUNT ET AL) 21 March 1995 (1995-03-21) column 8, lines 6-12; figures 2,4 column 11, lines 1-6 column 7, lines 57-60</p> <p>-----</p>	1-20
X	<p>LI ZHEN ET AL: "A modified sub-optimum adaptive bit and power allocation algorithm in wideband OFDM system" CCECE 2003. CANADIAN CONFERENCE ON ELECTRICAL AND COMPUTER ENGINEERING. MONTREAL, CANADA, MAY 4 - 7, 2003, CANADIAN CONFERENCE ON ELECTRICAL AND COMPUTER ENGINEERING, NEW YORK, NY : IEEE, US, vol. VOL. 3 OF 3, 4 May 2003 (2003-05-04), pages 1589-1592, XP010654111 ISBN: 0-7803-7781-8 page 1590, left-hand column, last paragraph - page 1591, left-hand column, paragraph 2</p> <p>-----</p>	1-20

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
US 2003043732 A1	06-03-2003	US 2003048856 A1		13-03-2003
		BR 0210656 A		05-10-2004
		EP 1410526 A1		21-04-2004
		JP 2004531980 T		14-10-2004
		WO 03001702 A1		03-01-2003
		BR 0209640 A		31-08-2004
		EP 1389366 A2		18-02-2004
		JP 2004535105 T		18-11-2004
		TW 576032 B		11-02-2004
		WO 02093779 A2		21-11-2002
		US 2003112880 A1		19-06-2003
US 5400322 A	21-03-1995	NONE		